

ABSTRACT OF THE DISCLOSURE

Attempting to provide an illumination optical system and an exposure apparatus using the same, which  
5 provide a more uniform angular distribution of light for illuminating a mask than the prior art, an illumination optical system for illuminating an object surface includes an optical unit that converts light from a light source section into approximately parallel  
10 light, and includes first and second mirrors, wherein the first mirror has an opening, through which light reflected by the second mirror passes.